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APPLICATION NO).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/762,070	10/762,070 01/21/2004		Noah Chen	JCLA12713	4581	
23900	7590	12/30/2005		EXAM	EXAMINER	
J C PATE	•		PICKETT,	PICKETT, JOHN G		
4 VENTURE, SUITE 250 IRVINE, CA 92618				ART UNIT	PAPER NUMBER	
				3728	3728	
				DATE MAILED: 12/30/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/762,070	CHEN, NOAH				
Office Action Summary	Examiner	Art Unit				
	Gregory Pickett	3728				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a) ☐ This action is FINAL . 2b) ☑ This 3) ☐ Since this application is in condition for allowar	Responsive to communication(s) filed on <u>13 October 2005</u> . This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) Claim(s) 1-7,10 and 12-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-7,10 and 12-17 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 21 January 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal R 6) Other:					

Application/Control Number: 10/762,070 Page 2

Art Unit: 3728

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 October 2005 has been entered. Claims 1-7, 10, and 12-17 are pending in the application. Claims 8, 9, and 11 have been canceled.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7, 10, 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the ammonium sulfate crystals" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-6 are dependent on claim 1 and are rejected for the above reason.

Claim 7 recites the limitation "the ammonium sulfate crystals" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claims 10 and 12-15 are dependent on claim 7 and are rejected for the above reason.

Claim 16 recites the limitation "the ammonium sulfate" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 is dependent on claim 16 and is rejected for the above reason.

Claim Rejections - 35 USC § 103

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (Figures 1-4; hereinafter PA) in view of Nyseth et al (US 6,010,008) and Baseman et al (US 5,346,518).

Regarding claims 1-3, the claim appears to invoke the provisions of 35 U.S.C. 112, 6th paragraph. In interpreting the structure involved in the prevention means, the examiner looks to paragraphs [0021] and [0022], where the structures are defined as an o-ring seal and drying agent.

PA discloses a SMIF box **200** with a base pedestal **220** and a cover **210**. PA merely lacks the o-ring seal and drying agent.

Nyseth discloses o-ring seals **118 & 120** for sealing the breaks or openings between the interior and exterior (Col. 3, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the PA box

Page 4

Art Unit: 3728

with o-ring seals as taught by Nyseth et al in order to seal the connection between the base and cover.

Baseman et al discloses vapor removal element **30** with a drying agent **32** and a filter net **34** for minimizing contamination of the components within the enclosure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the SMIF of PA-Nyseth with a drying agent and filter net as taught by Baseman et al in order to minimize contamination of the retained components.

As to claim 4, PA discloses circular groove 212.

As to claims 5 and 6, PA discloses cavities **214**. It would have been an obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to provide the drying agent of PA-Nyseth-Baseman in the cavities in order to maximize the use of space.

5. Claims 7, 10, and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over PA in view of Dickinson et al (US 2003/0232512 A1), Nyseth et al (US 6,010,008), and Baseman et al (US 5,346,518).

Regarding claims 7 and 10, since the claim defines the structure involved in the means-plus-function language, the provisions of 35 U.S.C. 112, 6th paragraph are not invoked.

PA discloses a SMIF box **200** with a base pedestal 220 and a cover **210**, and a SMIF box loader **300**. PA does not expressly disclose a hermetically sealed loader.

Dickinson et al discloses a hermetically sealed loader **20** for maintaining desired process conditions (see paragraph [0004]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the loader of PA as hermetically sealed in order to maintain desired process conditions.

PA-Dickinson discloses the claimed invention except for the o-ring seal and drying agent.

Nyseth discloses o-ring seals **118 & 120** for sealing the breaks or openings between the interior and exterior (Col. 3, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the PA-Dickinson box with o-ring seals as taught by Nyseth et al in order to seal the connection between the base and cover.

Baseman et al discloses vapor removal element **30** with a drying agent **32** and a filter net **34** for minimizing contamination of the components within the enclosure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the SMIF of PA-Dickinson-Nyseth with a drying agent and filter net as taught by Baseman et al in order to minimize contamination of the retained components.

As to claims 12 and 13, PA discloses cavities **214**. It would have been an obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to provide the drying agent of PA-Dickinson-Nyseth-Baseman in the cavities in order to maximize the use of space.

As to claims 14-17, Dickinson discloses an inert gas inlet **81** for nitrogen and an air outlet **77** (see paragraph [0058]). It would have been obvious to one of ordinary skill

Application/Control Number: 10/762,070 Page 6

Art Unit: 3728

in the art at the time the invention was made to include these features in the system of PA-Dickinson-Nyseth-Baseman in order to purge the compartment of contaminants.

Response to Arguments

- 6. Applicant's arguments filed 13 October 2005 have been fully considered but they are not persuasive.
- 7. In response to applicant's argument that Nyseth, Baseman, and Dickinson fail to disclose the prevention of the formation of ammonium sulfate crystal, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).
- 8. In response to applicant's argument that Nyseth and Dickinson are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Nyseth and Dickinson are in the applicant's field of endeavor, namely semiconductor manufacture. The fact that the situation for holding wafers is different from the situation for holding reticles does not detract from the fact that they

Application/Control Number: 10/762,070

Page 7

Art Unit: 3728

are within the same field of endeavor. Wafers need to be protected from contamination, and one of ordinary skill in the art would find a means for protecting wafers as highly relevant to the protection reticles. The fact that applicant uses the seal and drying agent for a different purpose does not alter the conclusion that its use in a prior art device would be *prima facie* obvious from the purpose disclosed in the reference. See In re Lintner, 173 USPQ 560. All benefits of claimed invention need not be explicitly disclosed in reference to render claim unpatentable under 35 USC 103. See In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). Since the claimed subject matter would have been obvious from the references, it is immaterial that the references do not state the problem or advantage ascribed by applicant. See In re Wiseman, 201 USPQ 658.

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Application/Control Number: 10/762,070 Page 8

Art Unit: 3728

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Pickett whose telephone number is 571-272-4560. The examiner can normally be reached on Mon-Fri, 11:30 AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Toc Greg Pickett Examiner 22 December 2005

Primary Examiner